REMARKS

Claims 32-40 remain pending in the application. Favorable reconsideration of the application is respectfully requested.

I. REJECTION OF CLAIMS 32 AND 34-39 UNDER 35 USC §103(a)

Claims 32 and 34-39 now stand rejected under 35 USC §103(a) based on *Applicants Admitted Prior Art (Figs. 13-19)*, hereinafter *"AAPA"*, in view of newly cited *Fanning et al*. Applicants again respectfully traverse the rejection for at least the following reasons.

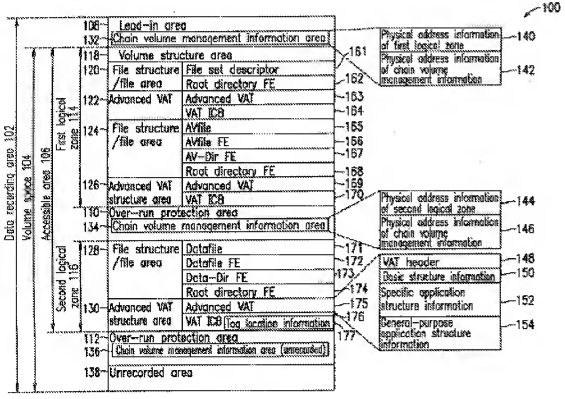

Fig. 1 of Present Application

Again to briefly review, the present invention relates to an information recording medium 100 that includes a lead-in area 108 and a volume space 104 as exemplified in Fig. 1 (reproduced above). In particular, advanced virtual allocation table (VAT) structure areas 122 and 126 are recorded in the first logical zone 114. In each of the advanced VAT structure areas, an advanced VAT and a VATICB are recorded, wherein the recording position of the advanced VAT is designated by the VATICB. (See, e.g., Spec., p. 38, lns. 3-26). Similarly, in the second logical zone 116, an advanced VAT structure area 130 is recorded which includes an advanced VAT 175 and a VATICB 176.

Specifically, the advanced VAT 175 includes a VAT header 148, basic structure information 150, specific application structure information 152, and general-purpose application structure information 154. (See, e.g., p. 41, lns. 20-23).

The basic structure information 150 is used to define a basic structure shared by a plurality of applications (e.g., a structure indispensable for interpreting a file structure, such as the file set descriptor 161 or the root directory file entry 162). (See, e.g., p. 41, lns. 25-29).

The specific application structure information 152 is used to define a specific application structure in association with a specific application out of a plurality of applications (e.g., a structure indispensable for searching an AVfile used in a household AV apparatus). (See, e.g., p. 41, ln. 31 to p. 42, ln. 2).

The general-purpose application structure information 154 is used to search a file in general applications, typically PC applications. (See, e.g., p. 42, lns. 4-6).

Claim 32 recites "... an advanced VAT structure area is allocated in the volume space, advanced VAT information for managing a relationship between virtual addresses each indicating an address in a virtual address space and logical addresses each indicating an address in a logical address space is recorded in the advanced VAT structure area, and in the advanced VAT information, basic structure information

indicating a file structure which is indispensable for searching all files recorded in the information recording medium is assigned to at least one of the virtual addresses".

The advantages of sch features are that it is possible to read out the target file at a higher speed (see, e.g., p. 35, lns. 5-16) and it is also possible to read out a target file by searching a VAT using a small capacity memory and a low performance processor (see, e.g., p. 35, lns. 18-27).

Therefore, for example, a household AV apparatus having a restricted capacity memory and a relatively low performance processor can read out an AVfile at a high speed consistently using only the head sector of an area in which an advanced VAT is recorded. (See, e.g, p. 45, lns. 14-20).

i. Argument

Applicants previously argued how *AAPA does not teach or suggest* that in the advanced VAT information, basic structure information indicating a file structure *which is indispensable for searching all files recorded in the information recording medium is assigned to at least one of the virtual addresses* as recited in claim 32.

The Examiner now admits that *AAPA* does not disclose advanced VAT information in which basic structure information indicating a file structure which is indispensable for searching all files recorded in the information recording medium is assigned to at least one of the virtual addresses as recited in claim 32.

On the other hand, the Examiner now argues that *Fanning et al.* discloses a file structure which is indispensable for searching all files recorded in the information recording medium being assigned to at least one of the virtual addresses. (O.A., p. 3, citing column 9, lines 1-25). The Examiner contends that it would have been obvious to combine the teachings of *Fanning et al.* with those of *AAPA* so as to result in the claimed invention. Applicants respectfully disagree for at least the following reasons.

Fanning et al. relates to a real-time search engine associated with the previously well-known Napster service. *Fanning et al.* describes a manner in which a provider server provides a real-time search engine with data object descriptions of data objects (e.g., songs) residing on the provider server, together with real-time search engine indexing data object descriptions. The data object descriptions provided by the provider server are purged from the real-time search engine when the provider server is disconnected from the real-time search engine. (See., e.g. Abstract).

Fanning et al. simply describes a process for a provider server 12 and real-time search engine 10 to exchange information relating to the various data objects (e.g., songs) that are available. There is no teaching or suggestion in *Fanning et al.* that any of the information relating to the data objects (e.g., songs) may be used as part of a file structure of an information recording medium. *Fanning et al.* does not teach or suggest in any way presenting a structure as recited in claim 32 having an advanced VAT structure area with advanced VAT information with basic structure information *indicating a file structure which is indispensable being assigned to at least one of the virtual addresses*.

Thus, *Fanning et al.* in no way makes up for the above-noted deficiencies in *AAPA*. Furthermore, the Examiner has not provided a sufficient basis as to how or why the teachings of *Fanning et al.* would even be applicable to the present invention. The Examiner has not indicated sufficient, if any, motivation for a person having ordinary skill in the art to take teachings from *Fanning et al.* and apply them to that which is taught in *AAPA*. Moreover, the Examiner has not clearly indicated what teachings, if any, of *Fanning et al.* would even be applicable.

According to MPEP §706.02(j), to establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art

reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

As previously noted, *Fanning et al.* is describing creating a real-time search engine 10 over the Internet which provides a search response containing data object (e.g., audio file, video file, etc.) descriptions and server descriptions of data objects that are currently available for transfer from a provider server 12 directly to a recipient client 16 in response to a recipient client search request 36.

Accordingly, *Fanning et al.* has only been shown to disclose a network configuration, as represented in Fig. 1, that provides a search response in response to a recipient client search request over the Internet. For example, a recipient client 16 connects to the real-time search engine 10 to locate a desired data object 24 and at least one provider server 12 connects to the real-time search engine 10 for providing one or more data object descriptions 22 to the real-time search engine. (See, e.g., Col. 3, lns. 10-22). However, throughout the entire disclosure of *Fanning et al.* (including the portion cited by the Examiner), *Fanning et al.* has not been shown to include a basic structure information indicating a file structure which is indispensable for searching all files recorded in the information recording medium assigned to at least one of the virtual addresses as recited in claim 32.

The text of *Fanning et al.* cited by the Examiner (i.e., Col. 9, lns. 1-25) merely gives several examples of the data objects 24 in different embodiments. For example, in one embodiment, the data objects 24 are audio files, in another embodiment, the data objects are image and video files, and in yet another embodiment, the data objects may be text, audio, image and video data objects. However, although *Fanning et al.* discloses several examples of data objects 24, *Fanning et al.* fails to teach or suggest any specific file structures that can be recorded on an information recording medium in regards to these data objects 24. Regardless, *Fanning et al.* does not disclose a file

structure that is *indispensable for searching all files* recorded in the information recording medium is *assigned* to at least one of the virtual addresses as recited in claim 32.

The Examiner states that the motivation for combining the teachings of *Fanning et al.* with *AAPA* is for the purpose of searching from a plurality of different types of data objects. However, the Examiner has not pointed to any teaching or suggestion of the desirability of such combination in the manner proposed by the Examiner. Even more particularly, the Examiner has not shown specifically how the teachings of Fanning could be combined with the teachings of *AAPA* to arrive at the presently claimed invention. Again, the text of Fanning cited by the Examiner merely describes different types of data objects and does not disclose or suggest any type of file structure that is indispensable as recited in claim 32.

Accordingly, the Examiner has failed to set forth even a *prima facie* basis for obviousness as required by the MPEP. *AAPA* and *Fanning et al.* must teach or suggest all the claim limitations. The teaching or suggestion of all the limitations together with the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. Absent such prima facie showing, the rejection must be withdrawn.

The remaining independent claims may be distinguished over the references for at least the same reasons as claim 32. Moreover, the various dependent claims may be distinguished for at least the same reasons as the claims from which they depend.

II. REJECTION OF CLAIMS 33 AND 40 UNDER 35 USC §103(a)

Remaining claims 33 and 40 remain rejected under 35 USC §103(a) based on *AAPA* and *Fanning et al.* in view of *Hemdal*. Applicants respectfully traverse this rejection for at least the following reasons.

Claims 33 and 40 are allowable for at least the same reasons discussed above with respect to the claims from which they depend.

Moreover, the Examiner maintains the rejection of claim 33 by relying primarily on *Hemdal*. In response to the previous Office Action, applicants argued that *Hemdal* fails to teach or suggest the features of claim 33. However, the Examiner did not address applicants' arguments whatsoever.

Therefore, to reiterate, the Examiner contends that *Hemdal* teaches a virtual address of 0 and a virtual address of 1, and that it would have been obvious to assign a logical address of the file set descriptor to a virtual address 0 and a second VAT entry for assigning a logical address of the file entry of the root directory to a virtual address 1, based on the teachings of *Hemdal*.

However, *Hemdal* does not in any way teach or suggest that the file set descriptor and file entry of a root directory be basic structure information which is indispensable and included in the VAT information in a recording medium. Consequently, even if combined, the teachings *AAPA* and *Hemdal* do not result in the claimed invention.

Hemdal merely discloses an apparatus for the conversion of virtual to real addresses which can convert the addresses without requiring instruction from the central processing unit (CPU). (See, Col. 16, lns. 16-21). Additionally, *Hemdal* merely discloses that when the data element P is to be accessed, the CPU 204 now only has to issue the virtual address 0, then the MCU 200 will assert the corresponding real address (X+0) to the Main Memory 202. (See, Col. 24, lns. 5-7). *Hemdal* further merely discloses that "when the CPU 204 issues the virtual address 1, then the real address which will be issued by the CUP 204 will be either X+1, X+12 or X+23". (See, Col. 24, lns. 29-31).

Thus, it would not have been obvious to one having ordinary skill in the art to combine the teachings of *AAPA* and *Hemdal* in the manner proposed by the Examiner.

Perhaps more importantly, even if the teachings were combined the claimed invention would not result. *Hemdal* simply does not make up for the deficiencies in *AAPA* and *Fanning et al.* as pointed out above.

Hence, applicants respectfully request withdrawal of the rejection of claim 33, and the rejection of claim 40 as well.

III. CONCLUSION

Accordingly, all claims 32-40 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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